

Claims

The following listing of claims replaces all prior versions. Please amend the claims as follows:

1. (previously presented) A mounting arrangement for at least one optical component in a planar lightwave circuit, the arrangement comprising:

a substrate,

an input optical fiber mounted on said substrate,

an output optical waveguide in a given set of planar layers of said substrate,

said one optical component is mounted on said substrate to transmit optical radiation from said input optical fiber to said output optical waveguide,

and a further optical waveguide is disposed on said substrate in the same planar layers of said output optical waveguide wherein said output optical waveguide and said further optical waveguide are aligned along an input-to-output propagation path, thereby providing substantial alignment of said output optical waveguide and said further optical waveguide, said further optical waveguide is interposed between said input optical fiber and said optical component and wherein said optical component is interposed between said further optical waveguide and said output optical waveguide.

2. (previously presented) The arrangement of claim 1, wherein said substrate is a silicon optical bench (SiOB) support.

3. – 7. (canceled)

8. (currently amended) The arrangement of claim 1, wherein respective end surfaces of said output optical waveguide and said further optical waveguide are laterally offset to a perpendicular to said input-to-output propagation path, and a propagation path of radiation through said at least one optical component is at an angle with respect to said input-to-output propagation path.

9. (previously presented) The arrangement of claim 1, wherein said at least one optical component comprises an optical isolator.

10. (previously presented) The arrangement of claim 9, wherein said optical isolator is optimised for focused beams.

11. (previously presented) The arrangement of claim 1, wherein said at least one optical component comprises an optical filter.

12. (previously presented) The arrangement of claim 1, wherein said at least one optical component comprises at least one spherical or ball lens.

13. (previously presented) The arrangement of claim 12, wherein said substrate comprises at least pyramidal hole for receiving said at least one spherical or ball lens.

14. (previously presented) The arrangement of claim 1, wherein said at least one optical component comprises a symmetrical optical system having an internal image.
15. (previously presented) A mounting arrangement for at least one optical component in a planar lightwave circuit, the arrangement comprising:
- a substrate,
 - an input optical fiber mounted on said substrate,
 - an output optical waveguide in a given set of planar layers of said substrate,
 - said optical component is mounted on said substrate to transmit optical radiation from said input optical fiber to said output optical waveguide, and
 - a further optical fiber associated with said substrate between said optical component and said output optical waveguide so that said optical component is interposed between said input optical fiber and said further optical fiber.
16. (previously presented) The arrangement of claim 15, wherein said substrate is a silicon optical bench (SiOB) support.
17. (previously presented) The arrangement of claim 15, wherein said substrate comprises at least one V-groove for receiving at least one of said input optical fiber and said length of optical fiber.

18. (previously presented) The arrangement of claim 17, wherein said substrate comprises respective V-grooves for receiving said input optical fiber and said length of optical fiber, respectively, said respective V-grooves having the same geometry.

19. (previously presented) The arrangement of claim 15, wherein said input optical fiber is associated with said substrate and said length of optical fiber, and wherein said input optical fiber and said length of optical fiber are from the same fiber batch.

20. (previously presented) The arrangement of claim 15, wherein said input optical fiber and said length of optical fiber have respective end surfaces, said respective end surfaces comprising an anti-reflective coating.

21. (previously presented) The arrangement of claim 15, wherein said at least one optical component comprises an optical isolator.

22. (previously presented) The arrangement of claim 21, wherein said optical isolator is optimised for focused beams.

23. (previously presented) The arrangement of claim 15, wherein said at least one optical component comprises an optical filter.

24. (previously presented) The arrangement of claim 15, wherein said at least one optical component comprises at least one spherical or ball lens.

25. (previously presented) The arrangement of claim 24, wherein said substrate comprises at least pyramidal hole for receiving said at least one spherical or ball lens.

26. (previously presented) The arrangement of claim 15, wherein said at least one optical component comprises a symmetrical optical system having an internal image.